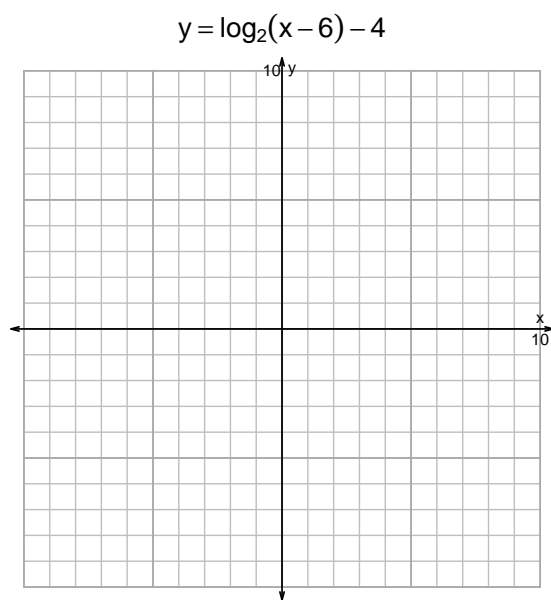
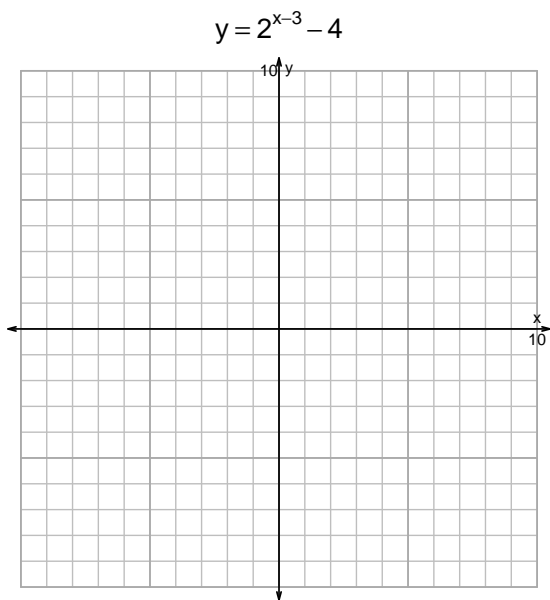


Name: \_\_\_\_\_

Date: \_\_\_\_\_

s18QUIZ: EXP LOG (EXAMPLE v3)

1. Graph  $y = 2^{x-3} - 4$  and  $y = \log_2(x - 6) - 4$  on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$13 = \left(\frac{4}{5}\right) \cdot 10^{7t/3}$$

3. An exponential function  $f(x) = 0.0792 \cdot e^{-1.72x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate  $f(1.5)$ .
- b. Express  $f^{-1}(x)$ , the inverse of  $f$ .
- c. Using the plot above, evaluate  $f^{-1}(0.02)$ .